

IN THE CLAIMS

Rewrite the claims as follows:

1. (Currently Amended) An air flow control valve including:

a valve body having an internal cavity and an inlet and outlet in flow communication with the internal cavity, the axes of the inlet and outlet being aligned at substantially 90° to each other;

a valve seat located within the cavity and co-axially aligned with the outlet, the valve seat being located on the ~~distil~~ distal end of an upstanding tubular pedestal which is formed around the outlet;

the internal cavity being configured so as to define an annular space around the pedestal with which the inlet is in flow communication;

a flexible generally planar diaphragm mounted above the valve seat, the diaphragm supporting a valve closure member which is adapted to engage the valve seat to close the valve;

valve control means for causing the diaphragm to move towards and away from the valve seat to close and open the valve respectively; and

the valve being characterized in that, with the valve oriented with the inlet axis horizontal and the outlet facing downwards, the valve seat is located at an elevation at or below the upper most edge of the inlet, and the diaphragm is located at an elevation above the upper most edge of the inlet.

2. (Original) An air flow control valve as claimed in claim 1 wherein an uppermost edge of the valve seat is located a distance which is approximately one third the diameter of said inlet above a centre line of said inlet.

3. (Previously Amended) An air flow control valve as claimed in claim 1, wherein said valve body has a bowl portion in which said inlet and said outlet are located, and a cap

portion in which said valve control means is located, said cap portion having screw threads thereon adapted to engage with screw threads on said bowl portion.

4. (Original) An air flow control valve as claimed in claim 3 wherein said diaphragm is captivity held in position between said cap portion and said bowl portion when said cap portion is operatively screwed onto the bowl portion.

5. (Previously Amended) An air flow control valve as claimed in claim 3, wherein screw threads on said bowl portion are of female configuration, and threads on said cap portion are of male configuration.

6. (Currently Amended) An air flow control valve ~~as claimed in claim 3, wherein~~ including:

a valve body having an internal cavity and an inlet and outlet in flow communication with the internal cavity, the axes of the inlet and outlet being aligned at substantially 90° to each other;

a valve seat located within the cavity and co-axially aligned with the outlet, the valve seat being located on the ~~distil~~ distal end of an upstanding tubular pedestal which is formed around the outlet;

the internal cavity being configured so as to define an annular space around the pedestal with which the inlet is in flow communication;

a flexible generally planar diaphragm mounted above the valve seat, the diaphragm supporting a valve closure member which is adapted to engage the valve seat to close the valve;

valve control means for causing the diaphragm to move towards and away from the valve seat to close and open the valve respectively; and

the valve being characterized in that, with the valve oriented with the inlet axis horizontal and the outlet facing downwards, the valve seat is located at an elevation at or

below the upper most edge of the inlet, and the diaphragm is located at an elevation above the upper most edge of the inlet;

the valve body having a bowl portion in which said inlet and said outlet are located, and a cap portion in which said valve control means is located, said cap portion having screw threads thereon adapted to engage with screw threads on said bowl portion;

the cross sectional area of said bowl portion's annular space relative to said valve seat's area is being in the range of 2.5:1 to 4.5:1.

7. (Currently Amended) An air flow control valve as claimed in claim 3, wherein including:

a valve body having an internal cavity and an inlet and outlet in flow communication with the internal cavity, the axes of the inlet and outlet being aligned at substantially 90° to each other;

a valve seat located within the cavity and co-axially aligned with the outlet, the valve seat being located on the ~~distil~~ distal end of an upstanding tubular pedestal which is formed around the outlet;

the internal cavity being configured so as to define an annular space around the pedestal with which the inlet is in flow communication;

a flexible generally planar diaphragm mounted above the valve seat, the diaphragm supporting a valve closure member which is adapted to engage the valve seat to close the valve;

valve control means for causing the diaphragm to move towards and away from the valve seat to close and open the valve respectively; and

the valve being characterized in that, with the valve oriented with the inlet axis horizontal and the outlet facing downwards, the valve seat is located at an elevation at or below the upper most edge of the inlet, and the diaphragm is located at an elevation above the upper most edge of the inlet;

the valve body having a bowl portion in which said inlet and said outlet are located,
and a cap portion in which said valve control means is located, said cap portion having screw
threads thereon adapted to engage with screw threads on said bowl portion;

the cross sectional area of said bowl portion's annular space relative to said valve seat's area is being in the range of 3.2:1 to 3.6:1.

8. (Previously Amended) An air flow control valve as claimed in claim 1, wherein said valve seat's internal diameter is larger than said outlet's internal diameter.

9. (Previously Amended) An air flow control valve as claimed in claim 1, wherein said tubular pedestal's inner wall tapers convergently from said valve seat towards said outlet.

10. (Previously Amended) An air flow control valve as claimed in claim 1, wherein said inlet and said outlet have a suitable connection arrangement for connecting air flow conduits to said valve.

11. (Original) An air flow control valve as claimed in claim 10, wherein said inlet and said outlet both have one of the following: an internally threaded socket adapted to each receive a respective externally threaded conduit; and externally threaded tubular member to receive a respective internally threaded conduit; or an attached flange adapted to be attached to a flange on a conduit.

12. (Previously Amended) An air flow control valve as claimed in claim 1, wherein said diaphragm has a bleed hole therethrough adapted to feed pressurized air from said annular space into a volume above said diaphragm.

13. (Previously Amended) An air flow control valve as claimed in claim 1, wherein said diaphragm is spring-loaded into engagement with said valve seat.

14-38. (Cancelled).

39. (New) An air flow valve as claimed in claim 1, wherein the elevation of the valve seat is located below the uppermost edge of a portion of the inlet located immediately adjacent to the internal cavity.

40. (New) An air flow valve as claimed in claim 39, wherein the diaphragm is located above said portion of the inlet located immediately adjacent to the internal cavity.